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Re:	USSN: 10/613,281 Applicant: Brookshire, Michael D.		

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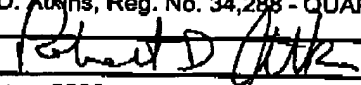
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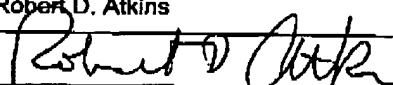
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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/613,281
	Filing Date	July 3, 2003
	First Named Inventor	Michael D. Brookshire
	Art Unit	3677
	Examiner Name	Lavinder, Jack W.
	Attorney Docket Number	121236.00003
Total Number of Pages in This Submission		24

ENCLOSURES (Check all that apply)		
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm or Individual name: Robert D. Atkins, Reg. No. 34,288 - QUARLES & BRADY STREICH LANG LLP Signature:  Date: April 24, 2006		

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FEE TRANSMITTAL
For FY 2005☒ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$) **250.00****Complete if Known**

Application Number	10/613,281
Filing Date	July 3, 2003
First Named Inventor	Michael D. Brookshire
Examiner Name	Lavinder, Jack W.
Art Unit	3677
Attorney Docket No.	121236.00003

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FEE CALCULATION**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims - 20 or HP = Extra Claims Fee (\$) Fee Paid (\$)

HP = highest number of total claims paid for, if greater than 20

Indep. Claims - 3 or HP = Extra Claims Fee (\$) Fee Paid (\$)

HP = highest number of independent claims paid for, if greater than 3

Multiple Dependent Claims

Fee (\$) Fee Paid (\$)

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets - 100 = Extra Sheets Number of each additional 50 or fraction thereof Fee (\$) Fee Paid (\$)

/ 50 = _____ (round up to a whole number) x _____ = _____

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other: (2402) Filing a Brief in Support of an Appeal

Fees Paid (\$)**\$250.00****SUBMITTED BY**

Signature	<u>Robert D. Atkins</u>	Registration No. <u>34,288</u>	Telephone <u>602-229-5311</u>
Name (Print/Type)	<u>Robert D. Atkins</u>	(Attorney/Agent)	Date <u>April 24, 2006</u>

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant(s) : Michael D. Brookshire
Serial Number : 10/613,281
Date of Filing : July 3, 2003
Title : *METHOD OF FACETING GEMSTONES TO
PRODUCE SPIRALING EFFECT*
Art Unit : 3677
Examiner : Lavinder, Jack W.
USPTO Customer No. : 26707
Attorney Docket No. : 121236.00003

APPEAL BRIEF

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Sir:

Appellant(s) submit the following Appeal Brief under 37 C.F.R. § 41.37 appealing the Final Rejection from the USPTO dated November 22, 2005.

I. REAL PARTY IN INTEREST

Michael D. Brookshire, Applicant is the real party in interest.

II. RELATED APPEALS AND INTERFERENCES

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QBPI-IX2004058.1

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Appellant(s) are aware of no appeals or interferences related to the present application.

III. STATUS OF CLAIMS

The present application contains 20 pending claims. Claims 25-44 have been finally rejected under 35 U.S.C. §103(a) as being unpatentable over the Diagrams for Faceting reference in view of Meyer (250378), Schenck (D35938), and Schenck (43724). A copy of claims 25-44, the claims on Appeal, is enclosed in the Claims Appendix.

IV. STATUS OF AMENDMENTS

A total of 24 claims were filed with the original application on July 3, 2003. In an Office Action dated November 30, 2004, claims 1-24 were subject to a restriction requirement under 35 U.S.C. § 121. Appellant(s) elected claims 1-12 drawn to a gemstone. Appellant(s) withdrew from consideration in the present application claims 13-24 drawn to a method of cutting gemstones. In a non-final Office Action dated March 22, 2005, the Examiner rejected claims 1-3, 5, 9-10 and 12 under 35 U.S.C. § 102(b) as being unpatentable over Meyer (250378). Claims 4, 6, 7, 8 11 and 12 were rejected under U.S.C. § 103(a) as being unpatentable over Meyer. In response to the Office Action, applicants cancelled claims 1-24 and added new claims 25-44. In a final Office Action dated February 22, 2006, the Examiner rejected claims 25-44 under 35 U.S.C. 103(a) as being unpatentable over the Diagrams for Faceting reference in view of Meyer (250378), Schenck (D35938), and Schenck (43724). Appellant(s) have made no further amendments to the claims.

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Appellant(s) filed the present appeal brief in response to the final Office Action.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The present application relates to a naturally occurring precious gemstone. The gemstone is cut to the form of a symmetrical hemisphere to maximize the light penetration and reflection. The more light that can be received and reflected by a gemstone, the greater the brilliance and scintillation. The gemstone of the present invention has a much larger crown area formed from many facets cut to produce a unique spiraling effect, see page 8, lines 2-17.

In one embodiment, the gemstone has a pavillion (42) with a plurality of facets (8-24) extending from a common point radially to a girdle region (40) around a circumference of the naturally occurring precious gemstone. A crown (2) meets the pavillion in the girdle region. The girdle region extends no further than the widest circumference of the crown and the pavillion extends no further than the widest circumference of the girdle region. The crown is a symmetrical hemisphere formed from a plurality of rows of facets with an equal number of facets in each row. The plurality of rows of facets extend continuously from the girdle region to a top point of the crown of the naturally occurring precious gemstone. Each row of facets is cut with respect to a reference line tangential to the top point of the crown. A first row of facets is cut about 15 degrees; a second row of facets is cut about 19 degrees; a third row of facets is cut about 25 degrees; a fourth row of facets is cut about 30 degrees; a fifth row of facets being cut about 34 degrees; a sixth row of facets is cut about 38 degrees; a

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seventh row of facets is cut about 46 degrees; an eighth row of facets is cut about 56 degrees; a ninth row of facets is cut about 65 degrees; a tenth row of facets is cut about 75 degrees; and an eleventh row of facets is cut about 90 degrees, see page 4, lines 8-14.

In another embodiment, the naturally occurring precious gemstone has a pavilion (42) with a plurality of facets (8-24) extending from a common point radially to a girdle region (40) around a circumference of the naturally occurring precious gemstone. A crown (2) meets the pavilion in the girdle region. The girdle region extends no further than the widest circumference of the crown and the pavilion extends no further than the widest circumference of the girdle region. The crown is formed from a plurality of rows of facets with an equal number of facets in each row. The plurality of rows of facets extends continuously from the girdle region to a top point of the crown of the naturally occurring precious gemstone. Each row of facets is cut with respect to a reference line tangential to the top point of the crown. A first row of facets is cut about 15 degrees; a second row of facets is cut about 19 degrees; a third row of facets is cut about 25 degrees; a fourth row of facets is cut about 30 degrees; a fifth row of facets is cut about 34 degrees; a sixth row of facets is cut about 38 degrees; a seventh row of facets is cut about 46 degrees; an eighth row of facets is cut about 56 degrees; a ninth row of facets is cut about 65 degrees; a tenth row of facets is cut about 75 degrees; and an eleventh row of facets is cut about 90 degrees, see page 4, lines 8-14.

In another embodiment, the naturally occurring precious gemstone has a pavilion (42) with a plurality of facets (8-24)

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extending from a common point radially to a girdle region (40) around a circumference of the naturally occurring precious gemstone. A crown (2) meets the pavilion in the girdle region. The girdle region extends no further than the widest circumference of the crown and the pavilion extends no further than the widest circumference of the girdle region. The crown is a symmetrical hemisphere formed from a plurality of rows of facets with an equal number of facets in each row. The plurality of rows of facets extend from the girdle region to a top point of the crown of the naturally occurring precious gemstone.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether claims 25-44 are unpatentable under U.S.C. § 103(a) over the Diagrams for Faceting reference in view of Meyer (250378), Schenck (D35938), and Schenck (43724).

VII. ARGUMENT

A. Legal Standard

Section 103(a) of Title 35 provides a standard for patentability of the claimed invention. To evaluate patentability under Section 103(a), the scope and content of the prior art are to be determined, differences between the prior art and the claims at issue are to be ascertained, and the level of ordinary skill in the pertinent art resolved. *Graham v. John Deere Co.* 383 U.S. 1 (1966). In considering the legal standard of obviousness, certain secondary considerations such as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the

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circumstances surrounding the origin of the subject matter sought to be patented. When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to in order to establish a *prima facie* case of obviousness: (i) the claimed invention must be considered as a whole; (ii) the references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; (iii) the references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (iv) reasonable expectation of success is the standard with which obviousness is determined. *Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986); *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

There are three sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998) (The combination of the references taught every element of the claimed invention, however without a motivation to combine, a rejection based on a *prima facie* case of obviousness was held improper.)

Obviousness can only be established through combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary

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skill in the art." *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also *In re Lee*, 277 F.3d 1338, 1342-44, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002) (discussing the importance of relying on objective evidence and making specific factual findings with respect to the motivation to combine references); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

**B. Claim 25 is patentable over prior art references
Diagrams for Faceting in view of Meyer (250378), Schenck
(D35938), and Schenck (43724).**

The Final Office Action rejected claim 25 under 35 U.S.C. 103 as being unpatentable over the Diagrams for Faceting reference in view of Meyer (250378), Schenck (D35938), and Schenck (43724). Appellant(s) respectfully traverse the rejection and submit the following arguments in favor of reversal of the rejection and allowance of the claim.

In Appellant(s)' response dated June 20, 2005, claim 25 was added to the application to more clearly distinguish over the prior art references. Claim 25 recites a naturally occurring precious gemstone comprising a pavilion having a plurality of facets extending from a common point radially to a girdle region around a circumference of the naturally occurring precious gemstone, and a crown meeting the pavilion in the girdle region. The girdle region extends no further than the widest

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circumference of the crown and the pavilion extends no further than the widest circumference of the girdle region. The crown is a symmetrical hemisphere formed from a plurality of rows of facets with an equal number of facets in each row. The plurality of rows of facets extend continuously from the girdle region to a top point of the crown of the naturally occurring precious gemstone. Each row of facets is cut with respect to a reference line tangential to the top point of the crown. A first row of facets is cut about 15 degrees; a second row of facets is cut about 19 degrees; a third row of facets is cut about 25 degrees; a fourth row of facets is cut about 30 degrees; a fifth row of facets is cut about 34 degrees; a sixth row of facets is cut about 38 degrees; a seventh row of facets is cut about 46 degrees; an eighth row of facets is cut about 56 degrees; a ninth row of facets is cut about 65 degrees; a tenth row of facets is cut about 75 degrees; and an eleventh row of facets is cut about 90 degrees.

The Diagrams for Faceting reference generally discloses a variety of cuts for gemstones. In particular, the Examiner references the Mogul cut on page 9 of the reference. The Mogul cut has 8 rows of crown facets cut at varying angles from a reference plane tangent to the top of the crown. The Examiner further references a pavilion having facets extending from the culet to the girdle on page 16 of the reference. Appellant(s) acknowledge the Examiner's statement that there are indeed many ways to cut a stone to bring about an aesthetically pleasing gemstone. Finally, the Examiner utilizes US design patents D35938 and D43724, and utility patent 250378 for the principle that it is known to have a crown in the shape of a symmetrical hemisphere with rows of facets cut at varying angles.

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Appellant(s) respectfully traverse the Examiner reasoning in rejecting claim 25 as being obvious in view of the above references. First, in the Diagrams for Faceting reference, the Mogul cut does not address the concerns of cutting facets in the shape of a symmetrical hemisphere. The facet cuts made in the Mogul design would not aid one skilled in the art in making such cuts. The facet cuts needed to maximize the light penetration and reflection and thereby bring out the desired brilliance and scintillation in a symmetrical hemisphere shape must be precise. The Examiner's position that generally making facet cuts somehow teaches a skilled practitioner to cut a symmetrical hemisphere as claimed is unsupported by the reference.

Second, Appellant(s) submit that the US design patents D35938 and D43724, and utility patent 250378, does not teach or suggest a crown in the form of a symmetrical hemisphere having a plurality of rows of facets with an equal number of facets in each row, wherein the plurality of rows of facets extend continuously from the girdle region to a top point of the crown. None of these references form a symmetrical hemisphere (half circle), nor do any of the references have a plurality of rows of facets with an equal number of facets in each row extending continuously from the girdle region to a top point of the crown.

Finally, none of the prior art references relied on by the Examiner (Diagrams for Faceting reference, US design patents D35938 and D43724, and utility patent 250378), taken singularly or in combination, teach or suggest the specific facet angles recited in claim 25. In claim 25, the symmetrical hemisphere is achieved by a first row of facets cut to about 15 degrees, a second row of facets cut to about 19 degrees, a third row of facets cut to about 25 degrees, a fourth row of facets cut to

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about 30 degrees, a fifth row of facets cut to about 34 degrees, a sixth row of facets cut to about 38 degrees, a seventh row of facets cut to about 46 degrees, an eighth row of facets cut to about 56 degrees, a ninth row of facets cut to about 65 degrees, a tenth row of facets cut to about 75 degrees, and an eleventh row of facets cut to about 90 degrees, each to a reference line tangential to the top point of the crown. The specific angle cuts provide the necessary light penetration and reflection to maximize the brilliance and scintillation of the gemstone.

There is no such teaching in any of the references.

Accordingly, Appellant(s) submit the Examiner is taking judicial notice by rejecting the claim upon references that fail to disclose every recited feature of the present invention.

In light of the foregoing, claim 25 is believed to patentably distinguish over the prior art references, taken singularly or in combination. Claims 26-31 are believed to be in condition for allowance as each is dependent from an allowable base claim.

**C. Claim 32 is patentable over prior art references
Diagrams for Faceting in view of Meyer (250378), Schenck
(D35938), and Schenck (43724).**

The Final Office Action rejected claim 32 under 35 U.S.C. 103 as being unpatentable over the Diagrams for Faceting reference in view of Meyer (250378), Schenck (D35938), and Schenck (43724). Appellant(s) respectfully traverse the rejection and submit the following arguments in favor of reversal of the rejection and allowance of the claim.

In Appellant(s)' response dated June 20, 2005, claim 32 was added to the application to more clearly distinguish over the

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prior art references. Claim 32 recites a naturally occurring precious gemstone comprising a pavilion having a plurality of facets extending from a common point radially to a girdle region around a circumference of the naturally occurring precious gemstone, and a crown meeting the pavilion in the girdle region. The girdle region extends no further than the widest circumference of the crown and the pavilion extends no further than the widest circumference of the girdle region. The crown is formed from a plurality of rows of facets with an equal number of facets in each row. The plurality of rows of facets extend continuously from the girdle region to a top point of the crown of the naturally occurring precious gemstone. Each row of facets is cut with respect to a reference line tangential to the top point of the crown. A first row of facets is cut about 15 degrees; a second row of facets is cut about 19 degrees; a third row of facets is cut about 25 degrees; a fourth row of facets is cut about 30 degrees; a fifth row of facets is cut about 34 degrees; a sixth row of facets is cut about 38 degrees; a seventh row of facets is cut about 46 degrees; an eighth row of facets is cut about 56 degrees; a ninth row of facets is cut about 65 degrees; a tenth row of facets is cut about 75 degrees; and an eleventh row of facets is cut about 90 degrees.

As stated, the Diagrams for Faceting reference generally discloses a variety of cuts for gemstones. In particular, the Examiner references the Mogul cut on page 9 of the reference. The Mogul cut has 8 rows of crown facets cut at varying angles from a reference plane tangent to the top of the crown. The Examiner further references a pavilion having facets extending from the culet to the girdle on page 16 of the reference. The Examiner utilizes US design patents D35938 and D43724, and

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utility patent 250378 for the principle that it is known to have a crown in the shape of a symmetrical hemisphere with rows of facets cut at varying angles.

Appellant(s) respectfully traverse the Examiner reasoning in rejecting claim 32 as being obvious in view of the above references. None of the prior art references relied on by the Examiner (Diagrams for Faceting reference, US design patents D35938 and D43724, and utility patent 250378), taken singularly or in combination, teach or suggest a crown formed from a plurality of rows of facets with an equal number of facets in each row extending continuously from the girdle region to a top point of the crown.

Moreover, none of the prior art references (Diagrams for Faceting reference, US design patents D35938 and D43724, and utility patent 250378), taken singularly or in combination, teach or suggest the specific facet angles recited in claim 32. In claim 32, the symmetrical hemisphere is achieved by a first row of facets cut to about 15 degrees, a second row of facets cut to about 19 degrees, a third row of facets cut to about 25 degrees, a fourth row of facets cut to about 30 degrees, a fifth row of facets cut to about 34 degrees, a sixth row of facets cut to about 38 degrees, a seventh row of facets cut to about 46 degrees, an eighth row of facets cut to about 56 degrees, a ninth row of facets cut to about 65 degrees, a tenth row of facets cut to about 75 degrees, and an eleventh row of facets cut to about 90 degrees, each to a reference line tangential to the top point of the crown. There is no such teaching in any of the references. Appellant(s) submit the Examiner is taking judicial notice by rejecting the claim upon references that fail to disclose every recited feature of the present invention.

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In light of the foregoing, claim 32 is believed to patentably distinguish over the prior art references, taken singularly or in combination. Claims 33-37 are believed to be in condition for allowance as each is dependent from an allowable base claim.

**D. Claim 38 is patentable over prior art references
Diagrams for Faceting in view of Meyer (250378), Schenck
(D35938), and Schenck (43724).**

The Final Office Action rejected claim 38 under 35 U.S.C. 103 as being unpatentable over the Diagrams for Faceting reference in view of Meyer (250378), Schenck (D35938), and Schenck (43724). Appellant(s) respectfully traverse the rejection and submit the following arguments in favor of reversal of the rejection and allowance of the claim.

In Appellant(s)' response dated June 20, 2005, claim 38 was added to the application to more clearly distinguish over the prior art references. Claim 38 recites a naturally occurring precious gemstone comprising a pavilion having a plurality of facets extending from a common point radially to a girdle region around a circumference of the naturally occurring precious gemstone, and a crown meeting the pavilion in the girdle region. The girdle region extends no further than the widest circumference of the crown and the pavilion extends no further than the widest circumference of the girdle region. The crown being a symmetrical hemisphere formed from a plurality of rows of facets with an equal number of facets in each row. The plurality of rows of facets extending from the girdle region to a top point of the crown of the naturally occurring precious gemstone.

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As stated, the Diagrams for Faceting reference generally discloses a variety of cuts for gemstones. In particular, the Examiner references the Mogul cut on page 9 of the reference. The Mogul cut has 8 rows of crown facets cut at varying angles from a reference plane tangent to the top of the crown. The Examiner further references a pavilion having facets extending from the culet to the girdle on page 16 of the reference. The Examiner utilizes US design patents D35938 and D43724, and utility patent 250378 for the principle that it is known to have a crown in the shape of a symmetrical hemisphere with rows of facets cut at varying angles.

Appellant(s) respectfully traverse the Examiner reasoning in rejecting claim 38 as being obvious in view of the above references. First, in the Diagrams for Faceting reference, the Mogul cut does not address the concerns of cutting facets in the shape of a symmetrical hemisphere. The facet cuts made in the Mogul design would not aid one skilled in the art in making such cuts. The facet cuts needed to maximize the light penetration and reflection and thereby bring out the desired brilliance and scintillation in a symmetrical hemisphere shape must be precise. The Examiner's position that generally making facet cuts somehow teaches a skilled practitioner to cut a symmetrical hemisphere as claimed is unsupported by the reference.

Second, Appellant(s) submit that the US design patents D35938 and D43724, and utility patent 250378, does not teach or suggest a crown in the form of a symmetrical hemisphere having a plurality of rows of facets with an equal number of facets in each row, wherein the plurality of rows of facets extend continuously from the girdle region to a top point of the crown. None of these references form a symmetrical hemisphere (half

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circle), nor do any of the references have plurality of rows of facets with an equal number of facets in each row extending continuously from the girdle region to a top point of the crown.

In light of the foregoing, claim 38 is believed to patentably distinguish over the prior art references, taken singularly or in combination. Claims 39-44 are believed to be in condition for allowance as each is dependent from an allowable base claim.

F. Conclusion

When properly considered in view of the applicable legal standard, claims 25-44 are believed to be patentable in view of the prior art of record. Appellant(s) request reversal of the final rejection and allowance of the subject patent application.

Respectfully submitted,
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Claims Appendix

25. A naturally occurring precious gemstone, comprising:

a pavilion having a plurality of facets extending from a common point radially to a girdle region around a circumference of the naturally occurring precious gemstone; and

a crown meeting the pavilion in the girdle region, wherein the girdle region extends no further than the widest circumference of the crown and the pavilion extends no further than the widest circumference of the girdle region, the crown being a symmetrical hemisphere formed from a plurality of rows of facets with an equal number of facets in each row, the plurality of rows of facets extending continuously from the girdle region to a top point of the crown of the naturally occurring precious gemstone, each row of facets being cut with respect to a reference line tangential to the top point of the crown, a first row of facets being cut about 15 degrees, a second row of facets being cut about 19 degrees, a third row of facets being cut about 25 degrees, a fourth row of facets being cut about 30 degrees, a fifth row of facets being cut about 34 degrees, a sixth row of facets being cut about 38 degrees, a seventh row of facets being cut about 46 degrees, an eighth row of facets being cut about 56 degrees, a ninth row of facets being cut about 65 degrees, a tenth row of facets being cut about 75 degrees, and an eleventh row of facets being cut about 90 degrees.

26. The naturally occurring precious gemstone of claim 25, wherein each of the plurality of rows of facets contain 16 individual facets.

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27. The naturally occurring precious gemstone of claim 25, wherein the pavilion is cut to contain 16 facets.

28. The naturally occurring precious gemstone of claim 25, wherein the plurality of facets in the pavilion are cut 40.75 degrees with respect to the reference line.

29. The naturally occurring precious gemstone of claim 25, wherein the top point of the crown is cut as a star-shaped center facet.

30. The naturally occurring precious gemstone of claim 25, wherein a facet in one row is disposed between two facets of an adjacent row.

31. The naturally occurring precious gemstone of claim 25, wherein the facets are formed as parallelograms.

32. A naturally occurring precious gemstone, comprising:
a pavilion having a plurality of facets extending from a common point radially to a girdle region around a circumference of the naturally occurring precious gemstone; and
a crown meeting the pavilion in the girdle region, wherein the girdle region extends no further than the widest circumference of the crown and the pavilion extends no further than the widest circumference of the girdle region, the crown being formed from a plurality of rows of facets with an equal number of facets in each row, the plurality of rows of facets extending continuously from the girdle region to a top point of

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the crown of the naturally occurring precious gemstone, each row of facets being cut with respect to a reference line tangential to the top point of the crown, a first row of facets being cut about 15 degrees, a second row of facets being cut about 19 degrees, a third row of facets being cut about 25 degrees, a fourth row of facets being cut about 30 degrees, a fifth row of facets being cut about 34 degrees, a sixth row of facets being cut about 38 degrees, a seventh row of facets being cut about 46 degrees, an eighth row of facets being cut about 56 degrees, a ninth row of facets being cut about 65 degrees, a tenth row of facets being cut about 75 degrees, and an eleventh row of facets being cut about 90 degrees.

33. The naturally occurring precious gemstone of claim 32, wherein each of the plurality of rows of facets contain 16 individual facets.

34. The naturally occurring precious gemstone of claim 32, wherein the pavilion is cut to contain 16 facets.

35. The naturally occurring precious gemstone of claim 32, wherein the plurality of facets in the pavilion are cut 40.75 degrees with respect to the reference line.

36. The naturally occurring precious gemstone of claim 32, wherein the top point of the crown is cut as a star-shaped center facet.

37. The naturally occurring precious gemstone of claim 32, wherein the facets are formed as parallelograms.

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38. A naturally occurring precious gemstone, comprising:

a pavilion having a plurality of facets extending from a common point radially to a girdle region around a circumference of the naturally occurring precious gemstone; and

a crown meeting the pavilion in the girdle region, wherein the girdle region extends no further than the widest circumference of the crown and the pavilion extends no further than the widest circumference of the girdle region, the crown being a symmetrical hemisphere formed from a plurality of rows of facets with an equal number of facets in each row, the plurality of rows of facets extending from the girdle region to a top point of the crown of the naturally occurring precious gemstone.

39. The naturally occurring precious gemstone of claim 38, wherein each row of facets is cut with respect to a reference line tangential to the top point of the crown, a first row of facets being cut about 15 degrees, a second row of facets being cut about 19 degrees, a third row of facets being cut about 25 degrees, a fourth row of facets being cut about 30 degrees, a fifth row of facets being cut about 34 degrees, a sixth row of facets being cut about 38 degrees, a seventh row of facets being cut about 46 degrees, an eighth row of facets being cut about 56 degrees, a ninth row of facets being cut about 65 degrees, a tenth row of facets being cut about 75 degrees, and an eleventh row of facets being cut about 90 degrees.

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40. The naturally occurring precious gemstone of claim 38, wherein each of the plurality of rows of facets contain 16 individual facets.

41. The naturally occurring precious gemstone of claim 38, wherein the pavilion is cut to contain 16 facets.

42. The naturally occurring precious gemstone of claim 39, wherein the plurality of facets in the pavilion are cut 40.75 degrees with respect to the reference line.

43. The naturally occurring precious gemstone of claim 38, wherein a facet in one row is disposed between two facets of an adjacent row.

44. The naturally occurring precious gemstone of claim 38, wherein the facets are formed as parallelograms.

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Evidence Appendix

No evidence has been submitted pursuant to 37 C.F.R. § 1.130, 1.131, or 1.132, or entered by the Examiner and relied upon by Appellant in the appeal.

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Related Proceedings Appendix

There are no related proceedings.